

UNCLASSIFIED
FISCAL YEAR (FY) 2009 BUDGET ESTIMATES

Exhibit R-2, RDT&E Budget Item Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				R-1 Item Nomenclature: Program Title: Industrial Preparedness Manufacturing Technology Program Element: 708011S			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	34.142	57.347	20.480	20.803	21.286	21.688	22.012
Project 1: Combat Rations (CR)	1.998	1.952	1.957	1.946	1.967	2.007	2.039
Project 2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)	3.713	3.883	4.041	4.226	4.314	4.401	4.470
Project 3: Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT)	1.303	2.584	2.615	2.627	2.666	2.692	2.717
Project 4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.112	1.202	1.216	1.226	1.258	1.283	1.304
Project 5: Material Acquisition: Electronics (MAE)	10.551	10.365	10.651	10.778	11.081	11.305	11.482
Project 6: Other Congressionally Added Programs (OCAs)	15.465	37.361	0	0	0	0	0

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Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7		R-1 Item Nomenclature: Program Title: Industrial Preparedness Manufacturing Technology Program Element: 708011S		
Mission Description and Budget Item Justification: The Defense Logistics Agency (DLA) Manufacturing Technology (ManTech) Program supports the development of a responsive, world-class manufacturing capability to affordably meet the warfighters’ needs throughout the defense system life cycle. ManTech: - Provides the crucial link between invention and product application to speed technology transitions. - Matures and validates emerging manufacturing technologies to support low-risk implementation in industry and DoD facilities, e.g. depots and shipyards. - Addresses production issues early by providing timely solutions. - Reduces risk and positively impacts system affordability by providing solutions to manufacturing problems before they occur. DLA ManTech includes Combat Rations Network for Technology Implementation (CORANET), Customer Driven Uniform Manufacturing (CDUM), Procurement Readiness Optimization—Advanced Casting Technology (PRO-ACT), Procurement Readiness Optimization—Forging Advance System Technology (PRO-FAST), and Material Acquisition: Electronics (MAE). DLA is not involved with execution of this program. Other Congressional Adds (OCA) programs are Congressionally Directed efforts.				
B. Program Change Summary:				
	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Previous PB08	33.570	20.114	20.627	20.978
Current BES	34.142	57.347	20.480	20.803
Total Adjustments	.572	37.233	-0.147	- 0.175
Reprogramming	1.200			
SBIR Transfer	-.628			
Congressional Adds, Econ Assumptions, Contractor Efficiencies		37.233		
Economic Assumptions			-0.147	-0.175
Change Summary Explanation: FY 2007: Reprogrammed \$1.2M from PE 0603712S to PRO-ACT, Project 3, to provide a critical level of research activity. 628K was reprogrammed to Small Business Innovative Research program (SBIR), PE 0605502S. FY2008: Increase due to Congressional Adds of \$37.6M, offset by \$.367M for Economic Assumptions and Contractor Efficiencies. FY2009/2010: Decrease due to Economic Assumptions.				

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<p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: N/A</p> <p>E. Performance Metrics: N/A</p>		

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Project Name and Number - Combat Rations (CR), Project 1			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Project 1: Combat Rations	1.998	1.952	1.957	1.946	1.967	2.007	2.039	
RDT&E Articles Quantity- N/A								
A. Mission Description and Budget Item Justification: In FY 2005 the Defense Supply Center Philadelphia (DSCP) sold \$3.9B in subsistence goods and services to the Department of Defense, making it DSCP’s largest supply chain. Sales in subsistence continue to grow, largely due to requirements for operations Iraqi Freedom and Enduring Freedom. The Combat Rations Program is focused on improving the manufacturing technologies related to the production and distribution of the combat rations that are at the forefront of these operations, including Meals Ready to Eat (MREs) as well as unitized group rations. The objectives are increased readiness, improved quality, increased ration variety, decreased cost. The CORANET program engages all elements of the supply chain including producers, military services, Army Natick, USDA, FDA, DLA, DSCP and academia to research and transition improved technologies for operational rations. To insure technology validation and transition, the CORANET program also maintains a demonstration site.								
B. Accomplishments/Planned Program:								
	FY 07	FY 08	FY 09	FY 10				
Accomplishment/ Effort/Subtotal Cost	1.998	1.952	1.957	1.946				
RDT&E Articles Quantity – N/A								
FY 2007 Accomplishments: (\$1.998) <ul style="list-style-type: none">- Ultra High Pressure Processing Eggs-Improved processing and formulation for MRE egg entrees to increase soldier acceptance (\$.147)- Quality Improvement Cheese Spread-Improved formulations for MRE item to reduce discoloration and improve shelf life (\$.138)- Technology Transition Retort Racks-Validation and transition of technology for reduced defects and failures in retort racks (\$.104)- Microbial Studies MRE Shelf Stable Pocket Sandwich-Acceptance of microbiological growth data by regulatory agencies (\$.146)- Knurled Seal Heat Bar Technology-Improved strength and increased production yield for MRE pouches (\$.099)- Oxygen Absorbing Packaging Materials-Elimination of scavenger sachets and improved shelf life (\$.315)- Four Sided Seal Tester-Improved testing process for reduced testing time and sample size (\$0.149)- Identify, define, review and implement research activities (\$0.500)- Demonstration site (\$0.400)								
FY 2008 Plans: (\$1.952) <ul style="list-style-type: none">- Partner support, identify, define, review and transition research activities (\$0.490)- Demonstration site (\$0.440)- Bakery Shelf Life Extension-Improved formulations, processes and packaging for increased shelf life and improved acceptance. (\$0.312)- Wet Pack Fruit Quality Improvement-Process and formulation improvement for increased shelf life. (\$0.390)								

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
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Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 1: Combat Rations	1.998	1.952	1.957	1.946	1.967	2.007	2.039
RDT&E Articles Quantity- N/A							
<ul style="list-style-type: none"> - Improving Insulated Beverage Dispenser-Improved process and materials for increased production, decreased cost and reduced lead-time (\$0.240) - Addition of Antioxidants to Combat Rations-Improved nutritional quality, reduced production costs and processing time. (\$0.080) <p>FY 2009 Plans (\$1.957)</p> <ul style="list-style-type: none"> - Transition to CORANET 3 (\$0.485) - New Short Term Projects and Partner support (\$1.472) <p>FY 2010 Plans (\$1.946)</p> <ul style="list-style-type: none"> - Identify, define, review and implement research activities (\$0.500) - New Short Term Projects and Partner support (\$1.446) <p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: N/A</p> <p>E. Major Performers: N/A</p>							

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Exhibit R-3, RDT&E Program Element/Project Cost Breakdown								Date: February 2008	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Combat Rations (CR), Project 1					
A. Project Cost Breakdown Combat Rations									
Project Cost Categories				FY 2007	FY 2008	FY 2009	FY2010		
a. Manufacturing Process Support Costs				1.998	1.952	1.957	1.946		
B. Budget Acquisition History and Planning Information									
Performing Organizations									
Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2007	FY 2008	FY 2009	FY2010	Budget to Complete	Total Program
				Cont	Cont	Cont.	Cont.		
Ameriqua	Cost, No Fee	12/2001	Partner						
Georgia, Univ of	Cost, No Fee	12/2001	Partner, STP*						
NCFST	Cost, No Fee	12/2001	Partner, STP						
Ohio State Univ	Cost, No Fee	12/2001	Partner, STP						
R&D Associates	Cost, No Fee	12/2001	Partner, STP						
Rutgers	Cost, No Fee	12/2001	Partner, STP, Demo						
SOPAKCO	Cost, No Fee	12/2001	Partner, STP						
Sterling	Cost, No Fee	11/2001	Partner						
TEES (TAMU)	Cost, No Fee	12/2001	Partner, STP						
Tennessee, Univ of	Cost, No Fee	12/2001	Partner, STP						
Wornick	Cost, No Fee	12/2001	Partner						
Wash State U	Cost, No Fee	12/2001	Partner, STP						
Michigan State U	Cost, No Fee	7/2006	Partner						
Virginia Tech	Cost, No fee	7/2006	Partner						
Diversapak	Cost, No Fee	7/2006	Partner						
Truitt	Cost, No Fee	7/2006	Partner						
Oregon Freeze Dry	Cost, No Fee	7/2006	Partner						
				1.998	1.952	1.957	1.946		
Government Furnished Property: None.							*STP = "Short Term Project"		

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Exhibit R-4, Schedule Profile																							Date: February 2008					
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology										Project Name and Number - Combat Rations (CR), Project 1													
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Quality Improvement Cheese Spread	X	X																										
Ultra High Pressure Processing Eggs	X	X																										
Acceptance Test for Retort Pouch Material																												
Technology Transition Retort Racks	X	X	X	X	X	X																						
Microbial Studies MRE Shelf Stable Pocket Sandwich	X	X	X	X	X	X																						
Knurled Seal Heat Bar Technology	X	X	X	X	X	X																						
Oxygen Absorbing Packaging Materials	X	X	X	X	X	X																						
New Short Term Projects					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Demonstration Site	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Identify, define, review and implement research activities	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Exhibit R-4a, Schedule Detail							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology				Project Name and Number - Combat Rations (CR), Project 1		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Quality Improvement Cheese Spread	1-2Q						
Ultra High Pressure Processing Eggs	1-2Q						
Acceptance Test for Retort Pouch Material							
Technology Transition Retort Racks	1-4Q	1-2Q					
Microbial Studies MRE Shelf Stable Pocket Sandwich	1-4Q	1-2Q					
Knurled Seal Heat Bar Technology	1-4Q	1-2Q					
Oxygen Absorbing Packaging Materials	1-4Q	1-2Q					
New Short Term Projects		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Demonstration Site	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Identify, define, review and implement research activities	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 2: Customer Driven Uniform Manufacturing	3.713	3.883	4.041	4.226	4.314	4.401	4.470
RDT&E Articles Quantity- N/A							
A. Mission Description and Budget Item Justification: The Department of Defense, through the Defense Logistics Agency, purchased \$2.54 billion of clothing and textile items in 2005. The lead-time is up to 15 months and the current inventory acquisition value is over \$1 billion. The current focus of DLA military clothing research is Customer Driven Uniform Manufacturing (CDUM). CDUM explores the application of advanced manufacturing and information technologies to the end-to-end management of non-recruit clothing (NRC). Each NRC supply chain has unique requirements not typically found in apparel industrial operations. CDUM will experiment with ways to help manufacturers meet the requirements specific to NRC (i.e. raw material tracking). It will also explore ways to account for NRC after it has left the wholesale system. The benefits will include improved asset visibility, accountability, and shelf-life management throughout an items' life cycle, reduced item cost, reduced operational costs, and improved readiness. Experimentation will identify promising technical solutions, prototype alternative solutions, and validate user requirements.							
B. Accomplishments/Planned Program							
	FY 07	FY 08	FY 09	FY 10			
Accomplishment/ Effort/Subtotal Cost	3.713	3.883	4.041	4.226			
RDT&E Articles Quantity – N/A							
FY 2007 Accomplishments: (\$3.713) <ul style="list-style-type: none">- Non-recruit clothing (NRC) business process baseline analyses (\$0.375)- Life cycle management for NRC (\$1.080)- Identification of Radio Frequency Identification Device (RFID)/Advanced Identification Technology (AIT) technologies for application to NRC (\$1.000)- Demonstration of RFID (Radio Frequency Identification Device) technology for recruit items at Lackland AFB (\$1.258)							
FY 2008 Plans: (\$3.883) <ul style="list-style-type: none">- RFID/AIT pilots for the NRC supply chain including Joint Service Lightweight Integrated Suite Technology (JSLIST), Individual Body Armor, and the Advanced Combat Uniform (ACU) at Lackland AFB and Travis VPCVSC(\$1.172)- NRC Prototype Demonstrations for items at Army Ft. Carson. (\$1.022)- Expanded 3D Body scanning demonstration for NRC (\$.722)- Explore RFID alternatives for Individual Protective Equipment (IPE) including near field technologies, active RFID, sensory networks, motes (\$.967)							

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 2: Customer Driven Uniform Manufacturing	3.643	3.883	4.041	4.226	4.314	4.401	4.470
RDT&E Articles Quantity- N/A							
<p>FY 2009 Plans (\$4.041)</p> <ul style="list-style-type: none"> - Expanded RFID/AIT Prototype Demonstrations (\$2.061) - Expanded NRC Prototype Demonstrations (\$1.490) - Extend from end-item manufacturers to fabric suppliers (\$.490) <p>FY 2010 Plans (\$4.226)</p> <ul style="list-style-type: none"> - Transition to CDUM II (\$.252) - Roadmap New Initiatives (\$0.991) - Prototype Implementations for NRC (\$1.491) - Prototype Implementations for RFID/AIT (\$1.492) <p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: N/A</p> <p>E. Major Performers: AdvanTech, Inc., Annapolis, MD. Award Date 3/2003, Cost Plus Fixed-Fee (CPFF), 3 Year base, 2 two year options. Contractor performs research and development in the area of supply chain management and integration.</p> <p>Product Data Integration Technologies, Inc. (PDIT), Inc., Long Beach, CA, Award Date 3/2002, CPFF, 3 year base, 2 two year options. Contractor performs research and development in the area of data base development for real time asset visibility and automated processing of electronic transactions.</p> <p>Human Solutions NA, Inc., Dearborn, MI, Award Date 3/2002, CPFF, 3 year base, 2 two year options. Contractor performs research and development in the area of 3D body scanning integration into supply chain management systems.</p>							

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Exhibit R-3, RDT&E Program Element/Project Cost Breakdown								Date: February 2008	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7						Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2			
A. Project Cost Breakdown Customer Driven Uniform Manufacturing									
Project Cost Categories						FY 2007	FY 2008	FY 2009	FY2010
a. Manufacturing Process Support Costs						3.713	3.883	4.041	4.226
 B. Budget Acquisition History and Planning Information									
Performing Organizations									
Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2007	FY 2008	FY 2009	FY2010	Budget to Complete	Total Program
				3.713	3.883	4.041	4.226		
PDIT	Cost Plus Fixed Fee/Contractor	03/2002							
AdvanTech	Cost Plus Fixed Fee/Contractor	03/2002							
Human Solutions	Cost Plus Fixed Fee/Contractor	03/2002							
 Government Furnished Property: None.									

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Exhibit R-4, Schedule Profile																							Date: February 2008					
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology												Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2											
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NRC business process baseline analyses.	x	x	x	x	x	x	x	x																				
RFID/AIT pilots for the NRC supply chain including JSLIST, Individual Body Armor and the ACU	x	x	x	x	x	x	x	x																				
Life cycle management for NRC	x	x	x	x	x	x	x	x																				
Extend from end-item manufacturers to fabric suppliers	x	x	x	x	x	x	x	x																				
Expansion, enhancement and refinement of RFID/AIT initiatives			x	x	x	x	x	x	x	x	x	x	x	x	x	x												
Expansion, enhancement and refinement of non-recruit clothing (NRC) initiatives			x	x	x	x	x	x	x	x	x	x	x	x	x	x												
RFID/AIT prototype demonstration							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
NRC prototype demonstrations							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			

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Exhibit R-4a, Schedule Detail							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology				Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Non-recruit clothing (NRC) business process baseline analyses.	1-4Q	1-4Q					
RFID/AIT pilots for the NRC supply chain including JSLIST, Individual Body Armor and the ACU	1-4Q	1-4Q					
Life cycle management for NRC	1-4Q	1-4Q					
Extend from end-item manufacturers to fabric suppliers.	1-4Q	1-4Q	1-4Q	1-4Q			
Expansion, enhancement and refinement of RFID/AIT initiatives	3-4Q	1-4Q	1-4Q	1-4Q			
Expansion, enhancement and refinement of non-recruit clothing initiatives	3-4Q	1-4Q	1-4Q	1-4Q			
RFID/AIT prototype demonstrations		3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-2Q
NRC prototype demonstrations		3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-2Q

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Project 3: Procurement Readiness Optimization-Advanced Casting Technology	1.303	2.584	2.615	2.627	2.666	2.692	2.717	
RDT&E Articles Quantity- N/A								
A. Mission Description and Budget Item Justification: Weapon system spare parts which use castings are responsible for a disproportionate share of backorders. Cast parts are 2% of National Stock Numbered parts but represent 4% of all backorders, and when only the oldest backorders are considered, up to 19% of them are castings. This program develops innovative technology and processes to improve the procurement, manufacture, and design of weapon system spare parts which use castings. The Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT) program takes a systems view and considers not only the Defense Logistics Agency (DLA) perspective but also the Military Service Engineering Support Activities (ESA) which DLA works with to solve technical issues, as well as the industrial supply base. The program has three components: Rapid Acquisition, Quality, and Cost Effectiveness								
B. Accomplishments/Planned Program								
	FY 07	FY 08	FY 09	FY 10				
Accomplishment/ Effort/Subtotal Cost	1.303	2.584	2.615	2.627				
RDT&E Articles Quantity – N/A								
FY2007 Accomplishment: (1.303)								
<ul style="list-style-type: none">• Rapid Acquisition<ul style="list-style-type: none">– Procurement Solutions for Castings – Through June, sent out 620 solicitations matched to tooling records to over 51 different companies (47 foundries, 4 machine shops). Total estimated dollar value of the 620 solicitations: \$5,069,157.– Casting Procurement Support – Provided direct technical / procurement support to 47 DLA NSNs.– Casting Procurement Tools - Conducted Metalcasting Technology Transfer events at DLA, ESA, and industry locations for over 250 DoD and industry procurement personnel.– Computational Tools for Short Run Insert Production and Improved Yield - Completed review of part quality/die design constraints. Started visualization approach to shot yield improvement.– Rapid Tooling for Short Run Metal Mold Applications and Increased Productivity – Evaluating high thermal conductivity materials Anviloy and copper-based materials for improving cycle times.– Productivity Improvements for Spare Part Components - Received two parts for evaluation of reserve evaluation technologies from DLA Supply Center Richmond through AMC CAST-IT Team. Conducted White Light and Laser Scanning. X-ray scheduled next. Initiated the design of an electronic reverse engineering guidance tool for die casters.								

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Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 3: Procurement Readiness Optimization-Advanced Casting Technology	1.303	2.584	2.615	2.627	2.666	2.692	2.717
RDT&E Articles Quantity- N/A							
<ul style="list-style-type: none"> • Quality <ul style="list-style-type: none"> - Cast Part Performance Prediction in the Presence of Discontinuities - Developed the software interfaces necessary to couple the casting simulation output to the casting performance prediction. - Casting Design, Inspection and Quality Standards for Military and Aerospace Aluminum Castings – In the development of reference radiographs for investment steel castings, master prints have been produced and reference images have been produced from the master prints. - Casting Specifications and Standards – Scanning metalcasting technical documents for web-accessibility. - High Performance Die Casting Alloys – Conducted studies to optimize the selected alloys and develop new alloys with better mechanical properties to meet these requirements. - Optimizing Corrosion Performance of Welds on 6 wt% Molybdenum (Mo) Super Austenitic Stainless Steel Castings - Preparation of test plates completed. - E356 Statistical Properties – Presented project plan and received approval of Metallic Materials Properties Development and Standardization (MMPDS) Handbook committee. • Cost Effectiveness <ul style="list-style-type: none"> - Cost-Effective Casting Applications - Demonstrated cost reduction of mortar cleaning mesh-holder through casting redesign - High Production Rate Process for Metal Matrix Composite Components - Samples been prepared for SSM casting trials at Vforge in Denver. <p>FY2008 Plans: (2.584)</p> <ul style="list-style-type: none"> • Rapid Acquisition <ul style="list-style-type: none"> - Procurement Solutions for Castings – Over 250 casting suppliers in the Casting Suppliers Database. - Casting Procurement Support – Provide direct technical / procurement support to 50 DLA NSNs. - Casting Procurement Tools - Conduct Metalcasting Technology Transfer events to four DLA, ESA, and/or industry locations. - Computational Tools for Short Run Insert Production and Improved Yield - Increase shot yield using modular tooling 							

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
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Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 3: Procurement Readiness Optimization-Advanced Casting Technology	1.303	2.584	2.615	2.627	2.666	2.692	2.717
RDT&E Articles Quantity- N/A							
<ul style="list-style-type: none"> - Rapid Tooling for Short Run Metal Mold Applications and Increased Productivity – Evaluate die life and cycle time of dies with laser-deposited cores. - Productivity Improvements for Spare Part Components - Implementation Strategies for each new technology. • Quality <ul style="list-style-type: none"> - Cast Part Performance Prediction in the Presence of Discontinuities - Begin to investigate effects of inclusions on static and fatigue properties. - Casting Design, Inspection and Quality Standards for Military and Aerospace Aluminum Castings – Prepare digital reference images with standard for ASTM balloting. Determine effect of chill and increased pressure on solidification under pressure. - Casting Specifications and Standards – Revision and publication of SFSA Handbook Supplement #2 Summary of Steel Casting Specifications. - High Performance Die Casting Alloys - Evaluate selected target alloys. - Optimizing Corrosion Performance of Welds on 6 wt% Molybdenum (Mo) Super Austenitic Stainless Steel Castings – Report on influence of welding parameters and post-weld heat treatments on weld microstructure. - E356 Statistical Properties – Test and analyze samples for properties. • Cost Effectiveness <ul style="list-style-type: none"> - Cost-Effective Casting Applications – Demonstrate two applications of cost / weight / time reduction through casting redesign / reverse engineering / new technology application. - High Production Rate Process for Metal Matrix Composite Components – SHS material property testing. <p>FY2009 Plans: (2.615)</p> <ul style="list-style-type: none"> • Rapid Acquisition <ul style="list-style-type: none"> - Procurement Solutions for Castings – Directing over \$750k/month worth of solicitations to foundries/suppliers. - Casting Procurement Support – Provide direct technical / procurement support to 50 DLA NSNs. - Casting Procurement Tools - Conduct Metalcasting Technology Transfer events to four DLA, ESA, and/or industry locations. - Computational Tools for Short Run Insert Production and Improved Yield - Reduce required holder block inventories for short run producers from one holder for every two dies to one holder for every four dies.. - Rapid Tooling for Short Run Metal Mold Applications and Increased Productivity – In-plant trials. - Productivity Improvements for Spare Part Components – Deployment of implementation strategies for new technologies. 							

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 3: Procurement Readiness Optimization-Advanced Casting Technology	1.303	2.584	2.615	2.627	2.666	2.692	2.717
RDT&E Articles Quantity- N/A							
<ul style="list-style-type: none"> • Quality <ul style="list-style-type: none"> - Cast Part Performance Prediction in the Presence of Discontinuities - Stress and durability modeling - Casting Design, Inspection and Quality Standards for Military and Aerospace Aluminum Castings – Simulate solidification of the casting without gating system or risers to identify porosity-prone areas due to design. - Casting Specifications and Standards – Deploy new electronic documentation library. - High Performance Die Casting Alloys - Test and analyze results; adjust alloy compositions for beta trials. - Optimizing Corrosion Performance of Welds on 6 wt% Molybdenum (Mo) Super Austenitic Stainless Steel Castings – Report on influence of filler metal composition on corrosion resistance. - E356 Statistical Properties - Compile Test Data. • Cost Effectiveness <ul style="list-style-type: none"> - Cost-Effective Casting Applications - Demonstrate two applications of cost / weight / time reduction through casting redesign / reverse engineering / new technology application. - High Production Rate Process for Metal Matrix Composite Components – Correlation of parameters, structures, and properties of SHS-cast components. <p>FY2010 Plans: (2.627)</p> <ul style="list-style-type: none"> • Rapid Acquisition <ul style="list-style-type: none"> - Procurement Solutions for Castings – Over 25,000 records in the Defense Tooling Database. - Casting Procurement Support – Provide direct technical / procurement support to 50 DLA NSNs. - Casting Procurement Tools - Conduct Metalcasting Technology Transfer events to four DLA, ESA, and/or industry locations. - Computational Tools for Short Run Insert Production and Improved Yield – Integrated system and documentation. - Rapid Tooling for Short Run Metal Mold Applications and Increased Productivity – Guidelines for materials selection and fabrication methods of rapid tooling. - Productivity Improvements for Spare Part Components – Electronic tool for productivity improvements. 							

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 3: Procurement Readiness Optimization-Advanced Casting Technology	1.303	2.584	2.615	2.627	2.666	2.692	2.717
RDT&E Articles Quantity- N/A							
<ul style="list-style-type: none"> • Quality <ul style="list-style-type: none"> - Cast Part Performance Prediction in the Presence of Discontinuities - Casting Design Recommendations and Inspection Guidelines - Casting Design, Inspection and Quality Standards for Military and Aerospace Aluminum Castings – ASTM digital radiography reference standard for investment steel castings. Solidification under Pressure (SuP) tensile property data. - Casting Specifications and Standards - Four additional casting design tutorials. - High Performance Die Casting Alloys – Industry trials. New premium grade alloys. - Optimizing Corrosion Performance of Welds on 6 wt% Molybdenum (Mo) Super Austenitic Stainless Steel Castings – Guidelines for optimized weld corrosion performance. - E356 Statistical Properties - Correlate NDE, structure, and properties. • Cost Effectiveness <ul style="list-style-type: none"> - Cost-Effective Casting Applications - Demonstrate two applications of cost / weight / time reduction through casting redesign / reverse engineering / new technology application. - High Production Rate Process for Metal Matrix Composite Components – In-plant trials. <p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: Competitive Broad Agency Announcement (BAA) evaluations complete</p> <p>E. Major Performers: N/A</p>							

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Exhibit R-3, RDT&E Program Element/Project Cost Breakdown								Date: February 2008	
Appropriation/Budget Activity RDT&E, Defense-wide BA: 7				Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3					
A. Project Cost Breakdown Procurement Readiness Optimization—Advanced Casting Technologies (PRO-ACT)									
Project Cost Categories				FY 2007	FY 2008	FY 2009	FY 2010		
a. Manufacturing Process Support Costs				1.303	2.584	2.615	2.627		
B. Budget Acquisition History and Planning Information									
Performing Organizations									
Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2007	FY 2008	FY 2009	FY 2010	Budget to Complete	Total Program
				1.303	2.584	2.615	2.627		
AdvanTech, Inc	Cost Share Contract	6/23/00	12.585						
AdvanTech, Inc	Cost share	10/1/05	14.442						
Government Furnished Property: None.									

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Exhibit R-4, Schedule Profile																							Date: February 2008					
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology												Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3											
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
New Program - will demonstrate readiness improvements by developing and applying innovative methods of designing, manufacturing and buying weapon systems spares through advanced casting technology.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 4: Procurement Readiness Optimization-Forging Advanced System Technology	1.112	1.202	1.216	1.226	1.258	1.283	1.304
RDT&E Articles Quantity- N/A							
A. Mission Description and Budget Item Justification: Weapon system spare parts which use forgings are responsible for a disproportionate share of DLA backorders. Forged parts are 3% of National Stock Numbers (NSNs) but 6% of backorders. This program develops methods and technology to improve the supply of forged parts. This program takes a holistic view of the problem and attacks root causes inside DLA, at DLA’s engineering support activity partners in the Services, and at DLA forging suppliers. The program has three thrusts: Business Enterprise Integration to improve supply support approaches; FORGE-IT to develop and improve technical problems; and R&D which develops new technology for forging suppliers, including new methods for making forge dies (typically the longest lead time item) and for simulation of metal flow inside the forge die (to eliminate trial and error development of the die).							
B. Accomplishments/Planned Program							
	FY 07	FY 08	FY 09	FY 10			
Accomplishment/ Effort/Subtotal Cost	1.112	1.202	1.216	1.226			
RDT&E Articles Quantity – N/A							
Forging Technology for Lead Time Reduction							
FY 2007 Accomplishments: (\$1.112)							
<ul style="list-style-type: none">Value stream analysis of shop floor and acquisition processes – The Ohio State University – Continued development of Production Flow Analysis Simplification Toolkit for application by forges throughout the US.Best practices for forging supplier selection and forging tooling database development – University of Toledo, MVTS, Information Handling Systems, and Plexus On Line – Increased the number of forging dies in the National Forging Tooling Database (NFTD) to over 200,000 dies representing over 70 forges in the country. Developed Dynamic Partnering software that helps forging users find suppliers that are technically capable of producing work in a timely and affordable manner. Dynamic Partnering is based on a hierarchical series of questions about material, geometry, and application that enhances the ability of procurement personnel to consistently and objectively make best value source selection decisions for highly engineered forged product forms.Continued to upload forge company tooling databases into the National Forge Tooling Database, so DoD can source forged parts to companies which already possess existing tooling, saving lead time, cost and technical risk.Deployed the FORGE-IT process in addressing forging technical and enterprise problems. Provided forging procurement assistance to DLA and DOD Services.							

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 4: Procurement Readiness Optimization-Forging Advanced System Technology	1.112	1.202	1.216	1.226	1.258	1.283	1.304
RDT&E Articles Quantity- N/A							
<p>FY 2008 – 2010 Plans: A new competitive Broad Area Announcement for forging manufacturing technology will be issued. This BAA will result in the implementation of forging technology programs based on project teams with substantial interaction among all of the elements of the forging acquisition and supply chain. All aspects of forging manufacturing technology are of interest, which will result in faster, more producible and more affordable forgings, especially for older weapon systems which have been out of production for a number of years and the original producer has gone out of business.</p> <p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: A Broad Agency Announcement (BAA) evaluations complete</p> <p>E. Major Performers: N/A</p>							

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Exhibit R-3, RDT&E Program Element/Project Cost Breakdown								Date: February 2008		
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4					
A. Project Cost Breakdown										
Procurement Readiness Optimization—Forging Advanced System Technology (PRO-FAST)										
Project Cost Categories					FY 2007	FY 2008	FY 2009	FY 2010		
a. Manufacturing Process Support Costs					1.112	1.202	1.216	1.226		
B. Budget Acquisition History and Planning Information										
Performing Organizations										
Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2007	FY 2008	FY 2009	FY 2010	Budget to Complete	Total Program	
AdvanTech, Inc	Contract	10/13/05	13.006	1.112	1.202	1.216	1.226			
Government Furnished Property: None.										

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Exhibit R-4, Schedule Profile																							Date: February 2008					
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology												Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4											
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Business Enterprise Integration	X	X	X	X																								
“FORGE-IT” projects	X	X	X	X																								
Forging R&D	X	X	X	X																								
New Forging Program					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Exhibit R-4a, Schedule Detail							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology				Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Business Enterprise Integration	1-4Q						
FORGE-IT Projects	1-4Q						
Forging R&D	1-4Q						
New Forging Program		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Material Acquisition: Electronics (MAE), Project 5				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Project 5: Material Acquisition: Electronics	10.551	10.365	10.651	10.778	11.081	11.305	11.482	
RDT&E Articles Quantity- N/A								
A. Mission Description and Budget Item Justification: Develop a capability to emulate most obsolete digital integrated circuits (ICs) in the federal catalog using a single, flexible manufacturing line. DoD has estimated that \$2.9 billion is spent every five years in redesigning circuit card assemblies. Much of these redesigns are driven by IC obsolescence. Commercial ICs have short Product Life Cycles (often available only 18 months), prior to moving on to the next generation of ICs. DoD maintains weapons systems much longer, resulting in an obsolescence problem. In order to avoid the excess costs and potential readiness issues associated with buying excessive inventories before commercial availability ceases, or redesigning the next higher assembly to eliminate the obsolete part, DLA (as the manager of 88% of the IC supply class) must have a capability to manufacture IC devices. This project develops that capability and will expand to succeeding generations of obsolete ICs through the Advanced Microcircuit Emulation program. In addition there has been increased concern over trusted sourcing issues, as most IC design and production has migrated to over seas suppliers and we have taken measures to address that issue in accordance with OSD direction.								
B. Accomplishments/Planned Program								
	FY 07	FY 08	FY 09	FY 10				
Accomplishment/ Effort/Subtotal Cost	10.551	10.365	10.651	10.778				
RDT&E Articles Quantity – N/A								
The Material Acquisition Electronics program continues to cover development and expansion of IC fabrication technology to emulate succeeding generations of discontinued or otherwise non available commercial technology. This includes transitioning to Low Rate Initial Production capability. Development of IC design capability and population of our design model library for efficient IC fabrication capability will continue to expand in order to accommodate both in-house and third-party (principally Original Equipment Manufacturer) design requirements. Continued development of IC characterization capability will mitigate lack of tech data issues commonly encountered in emulation of obsolete devices. In FY2007 we completed development of Silicon On Sapphire based Radiation Hardened IC’s for B2 aircraft, Emitter Coupled Logic devices for F-18 aircraft and developed several other devices applicable to a wide range of DoD weapons systems. Another significant achievement was obtaining Trusted Foundry Certification from the National Security Agency (NSA) to meet evolving critical application needs. FY2008 plans include development of high performance 0.5 micron arrays, complete a needs assessment for, and possible begin development of, Field Programmable Arrays (FPGA’s). We will continue development of Deep Trench Isolated Schotkey Radiation Hardened IC devices and focus on specific weapons system applications for more recent non-commercially procurable Application Specific Integrated Circuits (ASIC’s).								

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Material Acquisition: Electronics (MAE), Project 5			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 5: Material Acquisition: Electronics	10.551	10.365	10.651	10.778	11.081	11.305	11.482
RDT&E Articles Quantity- N/A							
<p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: N/A</p> <p>E. Major Performers: N/A</p>							

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Exhibit R-3, RDT&E Program Element/Project Cost Breakdown								Date: February 2008		
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Project Name and Number - Material Acquisition: Electronics (MAE), Project 5					
A. Project Cost Breakdown Material Acquisition: Electronics (MAE)										
Project Cost Categories					FY 2007	FY 2008	FY 2009	FY2010		
a. Manufacturing Process Support Costs					10.551	10.365	10.651	10.778		
B. Budget Acquisition History and Planning Information										
Performing Organizations										
Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2007	FY 2008	FY 2009	FY2010	Budget to Complete	Total Program	
				10.551	10.365	10.651	10.778			
Sarnoff Corp.										
LMI										
ARINC										
SPAWARSYSCEN										
Government Furnished Property: None.										

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Exhibit R-4, Schedule Profile																							Date: February 2008					
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology												Project Name and Number - Material Acquisition: Electronics (MAE), Project 5											
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Perform Gap Analysis (GA) of Commercial Technology.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Perform Base array designs required to fill GA.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Update design Library	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Develop prototypes for test and insertion.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Develop Low Rate Initial Production (LRIP) capability.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Transition new microcircuit designs to LRIP.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Perform process review	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Plan required process improvements.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Implement process improvements.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Monitor and adjust process improvements.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

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Exhibit R-4a, Schedule Detail							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology				Project Name and Number - Material Acquisition: Electronics (MAE), Project 5		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Perform Gap Analysis (GA)of Commercial Technology.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Perform base array designs required to fill GA.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Update design library.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Develop prototypes for test and insertion.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Develop Low Rate Initial Production (LRIP) capability	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Transition new microcircuit designs to LRIP	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Perform process review	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Plan required process improvements.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Implement process improvements.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Monitor and adjust process improvements	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Other Congressionally Added Programs (OCAs), Project 7			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 7: Other Congressionally Added Programs (OCAs)	15.465	37.361	0	0	0	0	0
RDT&E Articles Quantity- N/A							
Mission Description and Budget Item Justification: This R2 is for all the Congressionally added programs to the DLA Manufacturing Technology Program.							
B. Accomplishments/Planned Program							
	FY 07	FY 08	FY 09	FY 10			
Accomplishment/ Effort/Subtotal Cost	15.465	37.361	0	0			
RDT&E Articles Quantity – N/A							
FY 2007 Accomplishments:							
<ul style="list-style-type: none">- Advanced Microcircuit Emulation Program: (\$1.320) Utilized for transferring the development of an advanced capability to extract design data from sample microcircuits to the Sarnoff Corporation, Princeton NJ.- Copper-Based Castings Technology Program: (\$1.956) Copper Based Casting Technology (CBCT) has successfully developed and transitioned a method to die cast copper into super efficient electric motors. CBCT motors will be used in the latest generation of the Army High Mobility Equipment Transporter (HEMTT) and in the latest generation of Air Force aircraft ejection seats. Advanced Technology Institute, North Charleston, NC- Lithium Battery Systems for Asset Tracking: (\$1.759) Develop new experimental lithium rechargeable batteries for use in Global Active Asset Tracking devices. The new cell technology referred to as ANLCC will combine cathode material developed from research by Argonne National Laboratory and couple it with high capacity carbon material developed by EnerDel. The program will also integrate battery circuitry that controls heaters, cell balancing, thermal management and charge/discharge control to produce a battery that can operate at -40 degrees C and provide a long service life.- Next Generation Manufacturing Tech Initiative: (\$3.811) The purpose of the NGMTI is to accelerate the development and implementation of breakthrough manufacturing technologies in support of the transformation of the defense industrial base. The NGMTI plan targets the Defense industry (cross-service/DoD-wide) from the perspective of providing quantifiable benefits to the warfighter.- Northwest Manufacturing Initiative: (\$2.444) Conduct of research and development (R&D) to encourage defense industrial base development in support of defense logistics methods, and weapons systems engineering, manufacturing, and technology. GCAP proposes to achieve this goal through the Northwest Manufacturing Initiative to develop the defense industrial base through the application of systems engineering in support of the Defense Logistics Agency (DLA) and other DoD commands.							

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Exhibit R-2a, RDT&E Project Justification							Date: February 2008
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7				Project Name and Number - Other Congressionally Added Programs (OCAs), Project 7			
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 7: Other Congressionally Added Programs (OCAs)	15.465	37.361	0	0	0	0	0
RDT&E Articles Quantity- N/A							
<p>- 4 Ship Network Training Center: (\$1.907) Funds provided to support an R&D effort at Springfield Oh Air National guard. These funds will purchase two Simusphere for F-16 training. L-3 Communications Corporation Link Simulation and Training Division, Arlington, TX.</p> <p>- Joint Diminishing Manufacturing Capabilities: (\$1.418) Joint DMSMS (diminishing manufacturing sources and material shortages) Mitigation Capabilities Design the Joint DMSMS Mitigation Capability (JDMC) to offer a wide range of DMSMS management support to joint and allied customers. The Joint DMSMS Mitigation Capability (JDMC) shall be designed to offer a wide range of DMSMS management capabilities to joint and allied Foreign Military Sales (FMS) customers. The JDMC should leverage and integrate the many existing DMSMS tools, processes, training, and tracking capabilities at little to no cost to customers.</p> <p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: Funds are provided to executing agencies and placed on existing contracts with the intended recipient of the Congressional Addition.</p> <p>E. Major Performers: See information associated with each project provided under 2007 Accomplishments.</p>							

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Exhibit R-3, RDT&E Program Element/Project Cost Breakdown								Date: February 2008		
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity BA: 7					Project Name and Number - Other Congressionally Added Programs (OCAs), Project 7					
A. Project Cost Breakdown Other Congressionally Added Programs (OCAs)										
Project Cost Categories					FY 2007	FY 2008	FY 2009	FY 2010		
a. Manufacturing Process Support Costs					15.465	37.361	0	0		
B. Budget Acquisition History and Planning Information										
Performing Organizations										
Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2007	FY 2008	FY 2009	FY2010	Budget to Complete	Total Program	
TBD				15.465	37.361	0	0			
Government Furnished Property: None.										